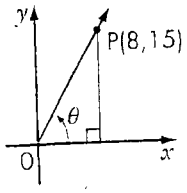
Review on Trig Ratios and Trig Angles

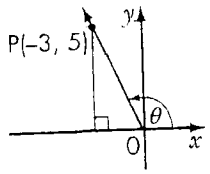
Question #1

Determine the exact trig ratios for sin θ, cos θ, and tan θ, given a point on the terminal arm as shown. Also, determine the angle θ.

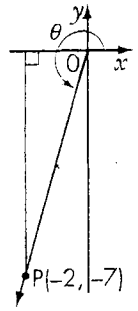
a)



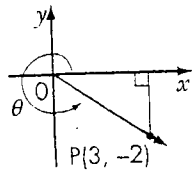
b)



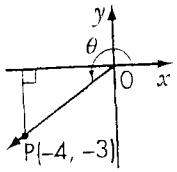
e)



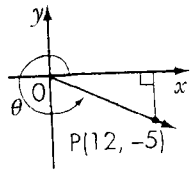
f)



c)



d)



Question #2

Determine the exact trig ratio for csc θ, sec θ, and cot θ, given that the terminal arm passes through the given point. Also, determine the angle θ.

(a) P(6,5) (b) P(-1,8) (c) P(-3,-9) (d) P(2,-4)

Question #3

Determine the exact trig ratio for each of the following:

(a) sin 30 (b) cos (-150) (c) tan (330) (d) csc (495) (e) sec (-585)

Question #4

Angle θ is in standard position with its terminal arm in the stated quadrant. Determine the primary trig ratios. Also, determine the angle θ.

(a) $sin\theta = \frac{4}{5}, quadrant\ II$

(b) $cos\theta = \frac{-2}{3}, quadrant\ III$

(c) $tan\theta = \frac{-5}{2}, quadrant\ IV$

(d) $csc\theta = \frac{-7}{3}, quadrant\ III$

Question #5

Solve for all values for the angle(s) θ , given the following equations:

(a) $sin\theta = \frac{-4}{7}, quadrant\ IV$

(b) $cot\theta = \frac{4}{5}, quadrant\ I$

(c) $sec\theta = \frac{-5}{3}$

(d) $cos\theta = \frac{5}{8}$

(e) 5 – 3 tanθ = 2 tanθ + 1

Question #6

Determine the exact value of each of the following:

(a) sin 30 sin 45 sin 60

(b) sin 30 sec 30 + sin 60 sec 60

(c) sin 60 cos 30 + sin 30 cos 60

(d) 2 sin 30 cos 30

(e) $(\sin^2 45)(\cos^2 45) - \cot 135$

(f) (csc 210) (sec 45) (cos 300)